

CLAIMS

What is claimed is:

1. A ground stake comprising:
 - a shaft defining a shaft axis, the shaft further comprising a penetration end shaped to facilitate forcing of the the shaft into soil and a driving end for driving the shaft into soil;
 - an attachment portion adapted to securely fasten an object to the stake;
 - a short vane depending outward from the shaft axis, the short vane defining a backfill space between the short vane and the shaft axis; and
 - wherein the short vane is effective in substantially resisting the removal of the shaft from soil into which it has been driven.
2. The apparatus of claim 1 wherein the short vane is shaped so as to provide less resistance to driving the shaft into soil than the resistance to the removal of the shaft from soil.
3. The apparatus of claim 1 wherein the short vane lies a plane parallel to the shaft axis.
4. The apparatus of claim 3 wherein the short vane lies in the same plane as the shaft axis.
5. The apparatus of claim 1 wherein the short vane comprises an insertion leading edge and an extraction leading edge.
6. The apparatus of claim 5 wherein:
 - the insertion leading edge defines an insertion angle of attack;
 - the extraction leading edge defines an extraction angle of attack; and
 - wherein the insertion angle of attack is less than the extraction angle of attack.
- 7 The apparatus of claim 1 wherein the shaft comprises a wire rod.
8. The apparatus of claim 1 wherein the short vane comprises a shaped wire rod.

9. The apparatus of claim 1 wherein the shaft and the short vane are made from a single shaped wire rod.
10. The apparatus of claim 1 further comprising at least one long vane having a short vane portion.
11. A ground stake comprising:
 - a shaft defining a shaft axis, the shaft further comprising a penetration end shaped to facilitate forcing of the shaft into soil and a driving end for driving the shaft into soil;
 - an attachment portion adapted to securely fasten an object to the stake;
 - a short vane depending outward from the shaft axis, wherein the short vane comprises an insertion leading edge and an extraction leading edge and wherein:
 - the insertion leading edge defines an insertion angle of attack;
 - the extraction leading edge defines an extraction angle of attack; and
 - wherein the insertion angle of attack is less than the extraction angle of attack;
 - and
 - wherein the short vane is effective in substantially resisting the removal of the shaft from soil into which it has been driven.
12. The apparatus of claim 11 wherein the shaft comprises a wire rod.
13. The apparatus of claim 11 wherein the short vane comprises a shaped wire rod.
14. The apparatus of claim 11 wherein the shaft and the short vane are made from a single shaped wire rod.
15. The apparatus of claim 11 wherein said short vane is made from sheet metal.